

Comments on GridWise Architecture Council / NIST Home-to-Grid Domain Expert Working Group Requirements

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Please identify the location of each comment by page and line number. Provide your comment and your proposed change, if any.

E/G/T: E = editorial (typo, grammar, clarification), G = general, T = technical

ID = (Company initials)-(comment number); e.g., NIST-1 for first NIST comment; NIST-2 for second NIST comment

Page	Line	E/G/T	ID	Comment	Proposed change	Resolution by subcommittee
3	Intro	E	PNNL-1	Intro should address WHY document is being assembled by and how it will be used by the DEWG. What does it mean if this doc is eventually adopted by the DEWG?	Add paragraph stating the DEWG process, DEWG goal in offering this document.	Accepted. Added new text to the end of the first introduction paragraph in Section 1 and inserted new second paragraph.
all	all	G	PNNL-2	I object to the term "requirements." These are not "requirements" if any H2G communication can be conducted without adhering to a stated "requirement." The statements may well have been "requirements" in the referenced Utility AMI HAN doc because the process there potentially had the teeth to affect the products adopted in CA. The DEWG is not a standard-forming body. This crosses the line.	Change all document occurrences of the word "requirements" to "recommendations" everywhere, including the title.	Noted. NIST specifically asked for a "requirements" document. Text was added at the end of Section 1 to explain that these requirements for communications protocol specifications are intended to assist in selecting protocols. These requirements do not apply to NIST, but rather to standards developing organizations (SDOs) that have issued protocol or may create new protocols for demand response.
4	82	E	PNNL-4	I like the definitions in this section 2 and they are clearly stated. However, I believe the presentation might have been improved by recognizing that the theme of Section 2 is the HAN.	Change line 82 to "Home Area Network Components." Sections 2.1 through 2.3 are good as examples of specialized HAN components under the heading.	Accepted. Text inserted.
9-10	229-249	T	PNNL-5	Honing these assumptions is a worthy and adequate goal for the H2G DEWG. I happen to think these 5 are a good set. The assumptions should have been adopted as the headings under which the recommendations (you call them "requirements") were organized.	Assumptions themselves should be a DEWG product.	Noted. Added some clarifying text.

10-18	250-500	T	PNNL-6	Sorry. I can't buy in to this. Despite your well-intentioned efforts, the result is not what the DEWG should endorse, in my opinion. It did not work for the committee to start from and adapt and adopt Utility AMI HAN text.	Either halt the process, or recompile a much more condensed and useful set of RECOMMENDATIONS. Consider the headings 1. Communications to Homes from Utilities; 2. Communication from Homes to Utilities. If we must, further include 3. Direct Load Control by Utilities or Aggregators. If the committee further insists on addressing local load management by an Energy Management Controller (and I think that discussion should be deferred), further include the heading 4. Local or Distributed Load Management;	Noted. The developers of this document were asked by NIST specifically to start with the UtilityAMI document. The concept and functions of an Energy Management Controller were published by ISO/IEC as an international document to enhance distributed load control.
10	259-263	T	PNNL-7	This second "requirement" already violates the stated assumption #4. I happen to agree with the assumption and not the "requirement."	See PNNL-5 and PNNL-6. Send document back to committee for refinement, reconsideration.	Accommodated. Considerable text was added for clarification. This document with revisions is being sent back to the H2G DEWG.
11	295, 297, 302-3 305	T	PNNL-8	Generation resource is mentioned only in these several lines.	Either remove these references to generation resources, or include them among introductory materials. DEWG should make a conscious decision whether distributed generation is within purview.	Accepted. Added text at the end of the first paragraph in Section 1.
17	462-3; 473-4	E	PNNL-9	These "requirements" are duplicates.	Remove duplicates.	Accepted.
17	478-493	T	PNNL-10	I fear that we are indiscriminately applying IP-scale network security throughout the HAN simply because we have not made a distinction between local communication within the premises and long-haul communication outside the home.	Back to committee. Please do not apply security equally to local and long-haul HAN communications.	Accepted. Inserted text to explain that security extends to the gateway. When a gateway is not present, security is extended to the HAN network and attached appliances.

all	all	G; T	PNNL-11	<p>The scope of this document “boils the ocean.” This document (and the entire DEWG) are floundering somewhat because we have failed to define and narrow what the H2G DEWG should address and accomplish. In my opinion, this document was too greatly influenced by proponents of energy management controllers. We should focus instead on essential communications BETWEEN THE HOME AND UTILITY, which communications can and should be affected by all the emerging home and utility opportunities for energy management.</p>	<p>Consider adopting the appended drawing. I believe the boxes accurately represent those elements defined in the document (and I for the most part like those definitions). I have taken the liberty of simplifying, for the sake of illustration, some of the distinctions between the Energy Management Controller and Gateway. I have included an Aggregator box to recognize that the “Utility” we speak of is not a homogenous body. In fact, signals might be received into the home from multiple “utility” entities. I have shown an in-home HAN boundary, a special extension of the HAN boundary outside the local region (which region should be subject to greater security), and a long-haul utility network. I have tried to represent all probable in-home and direct demand response communication pathways. Most communication pathways are shown as optional because there are nearly infinite connectivity options and no definition of a minimum system. <u>I strongly recommend we focus on the solid communication pathway between the Utility Service Provider and Utility-Home Gateway and defer addressing all other pathways.</u></p>	<p>Accepted. The figure has been inserted into the introduction. Text has been added to note that demand response may be provided by utilities and by third-party service providers such as aggregators.</p>
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